3510-22-P

#### DEPARTMENT OF COMMERCE

**National Oceanic and Atmospheric Administration** 

RIN 0648-XD807

Takes of Marine Mammals Incidental to Specified Activities; Construction Activities at the Children's Pool Lifeguard Station at La Jolla, California

**AGENCY**: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION**: Notice; proposed Incidental Harassment Authorization (IHA); request for comments.

SUMMARY: NMFS has received an application from the City of San Diego for an IHA to take small numbers of marine mammals, by Level B harassment, incidental to construction activities at the Children's Pool Lifeguard Station in La Jolla, California.

NMFS has reviewed the IHA application, including all supporting documents, and determined that it is adequate and complete. Pursuant to the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to issue an IHA to the City of San Diego to take, by Level B harassment only, three species of marine mammals during the specified activities.

**DATES**: Comments and information must be received no later than [insert date 30 days after date of publication in the FEDERAL REGISTER].

ADDRESSES: Comments on the IHA application should be addressed to Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910. The mailbox address for providing e-mail comments is *ITP.Goldstein@noaa.gov*. Please include 0648-XD807 in the subject line. NMFS is not responsible for e-mail comments sent to addresses other than the one provided here. Comments sent via e-mail, including all attachments, must not exceed a 25-megabyte size.

All comments received are a part of the public record and will generally be posted to <a href="http://www.nmfs.noaa.gov/pr/permits/incidental/">http://www.nmfs.noaa.gov/pr/permits/incidental/</a> without change. All Personal Identifying Information (for example, name, address, etc.) voluntarily submitted by the commenter may be publicly accessible. Do not submit Confidential Business Information or otherwise sensitive or protected information.

An electronic copy of the IHA application containing a list of the references used in this document may be obtained by writing to the address specified above, telephoning the contact listed below (see **FOR FURTHER INFORMATION CONTACT**), or visiting the Internet at: <a href="http://www.nmfs.noaa.gov/pr/permits/incidental/">http://www.nmfs.noaa.gov/pr/permits/incidental/</a>. Documents cited in this notice, including the IHA application, may also be viewed, by appointment, during regular business hours, at the aforementioned address.

**FOR FURTHER INFORMATION CONTACT**: Howard Goldstein or Jolie Harrison, Office of Protected Resources, NMFS, 301-427-8401.

#### **SUPPLEMENTARY INFORMATION:**

Background

Secretary of Commerce (Secretary) to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals, by United States citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed authorization is provided to the public for review.

Authorization for the incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant), and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring, and reporting of such takings are set forth.

NMFS has defined "negligible impact" in 50 CFR 216.103 as "...an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival."

Section 101(a)(5)(D) of the MMPA established an expedited process by which citizens of the United States can apply for an authorization to incidentally take small numbers of marine mammals by harassment. Section 101(a)(5)(D) of the MMPA establishes a 45-day time limit for NMFS's review of an application followed by a 30-day public notice and comment period on any proposed authorizations for the incidental harassment of small numbers of marine mammals. Within 45 days of the close of the public comment period, NMFS must either issue or deny the authorization.

Except with respect to certain activities not pertinent here, the MMPA defines "harassment" as: any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [Level B harassment].

## **Summary of Request**

On February 25, 2015, NMFS received an application from the City of San Diego, Engineering and Capital Projects Department, requesting an IHA for the taking of marine mammals incidental to construction activities. NMFS determined that the IHA application was adequate and complete on April 9, 2015.

The City of San Diego would undertake the proposed construction activities between June 2015 and June 2016 at the Children's Pool Lifeguard Station in La Jolla, California. In-air noise generated from equipment used during the construction activities is likely to result in the take of marine mammals. The requested IHA would authorize the take, by Level B (behavioral) harassment, of small numbers of Pacific harbor seals (*Phoca vitulina richardii*), California sea lions (*Zalophus californianus*), and northern elephant seals (*Mirounga angustirostris*) incidental to construction activities of the Children's Pool Lifeguard Station at La Jolla, CA. Because the proposed construction activities were subject to delays and cannot be completed by June 27, 2015, the City of San Diego has requested a renewal of the 2014 to 2015 IHA for an additional year. The construction activities are planned to take place during June 2015 to June 2016 in La Jolla, CA. Regarding the previous IHA, NMFS published a notice in the **Federal** 

**Register** (79 FR 8160) on February 11, 2014, making preliminary determinations and proposing to issue an IHA. The notice initiated a 30-day public comment period. On June 6, 2014, NMFS published a notice in the **Federal Register** (79 FR 32699) announcing the issuance of an IHA. Additional information on the construction activities at the Children's Pool Lifeguard Station is contained in the IHA application, which is available upon request (see **ADDRESSES**).

Also, NMFS issued the City of San Diego an IHA in 2013 (78 FR 40705, July 8, 2013) for demolition and construction activities at the Children's Pool Lifeguard Station that were scheduled to be completed in 2013. Because the construction activities were subject to delays (*e.g.*, nesting migratory birds, unexpected drainage pipes, unexpected demolition and construction planning, etc.) and could not be completed by December 15, 2013, the City of San Diego requested a renewal of the 2013 IHA for an additional year. Additional information on the construction activities at the Children's Pool Lifeguard Station is contained in the IHA application, which is available upon request (see **ADDRESSES**).

## **Description of the Proposed Specified Activity**

Overview

The City of San Diego plans to conduct construction activities at the Children's Pool Lifeguard Station in La Jolla, CA in order to meet the needs of the lifeguards at Children's Pool and the demand for lifeguard services. The overall project includes the demolition of the existing lifeguard station and construction of a new, three-story, lifeguard station on the same site. Demolition of the existing lifeguard station was completed in 2013 to 2014 and construction of the new lifeguard station is expected to be

completed in 2015 to 2016. Because the previously existing lifeguard station was demolished and closed to entry, a temporary lifeguard tower was moved onto the bluff near the previous lifeguard station.

# Proposed Dates and Duration

The City of San Diego is planning to begin/resume the project at the Children's Pool in La Jolla, CA on June 1, 2015, (see page 30 to 31 of the Negative Declaration in the IHA application) with completion of the new lifeguard station to be completed by December 15, 2015. The City of San Diego and NMFS are requiring a moratorium on all construction activities during harbor seal pupping and weaning (*i.e.*, December 15<sup>th</sup> to May 30<sup>th</sup>; see page 5 of the Mitigated Negative Declaration in the IHA application). Therefore, work on this project can only be performed between June 1<sup>st</sup> and December 14<sup>th</sup> of any year.

Proposed construction activities would generally occur Monday through Friday (no work will occur on holidays) during daylight hours only, as stipulated in the "Mitigated Negative Declaration" included in the IHA application and local ordinances. As a modification to the original IHA, the City of San Diego has requested that planned construction activities be allowed on weekends (*i.e.*, Saturday and Sunday to ensure completion of the project during 2015. The exact dates of the proposed activities depend on logistics and scheduling. The IHA is valid through June 2016 to allow for construction delays.

## Proposed Specific Geographic Region

The La Jolla Children's Pool Lifeguard Station is located at 827 ½ Coast Boulevard, La Jolla, CA 92037 (32° 50' 50.02" North, 117° 16' 42.8" West). The

locations and distances (in ft) from the construction site to the Children's Pool haul-out area, breakwater ledge/rocks haul-out area, reef haul-out area, and Casa Beach haul-out area can be found in the City of San Diego's IHA application.

Detailed Description of the Proposed Specified Activities

The Children's Pool was created in 1931 by building a breakwater wall which created a protected pool for swimming. Although partially filled with sand, the Children's Pool still has open water for swimming and a beach for sunbathing and beachcombing. The Children's Pool and nearby shore areas (*i.e.*, shoreline, beaches, and reefs of La Jolla) are used by swimmers, sunbathers, SCUBA divers and snorkelers, shore/surf fishermen, school classes, tide pool explorers, kayakers, surfers, boogie and skim boarders, seal, sea lion, bird and nature watchers, and for other activities by the general public. Over the last three years (2010 through 2012), an average of 1,556,184 people have visited the Children's Pool annually, and lifeguards have taken an average of 8,147 preventive actions and 86 water rescues annually (CASA, 2010; 2011; 2012).

The previous lifeguard facility at Children's Pool, built in 1967, was old, deteriorating from saltwater intrusion, and no longer served the needs of the lifeguard staff or the beach-going public. The structure was condemned on February 22, 2008 due to its deteriorated condition and lack of structural integrity. Because the existing building was no longer viable, a temporary lifeguard tower was moved in. However, a new lifeguard station is required to meet the needs of the lifeguards and the demand for lifeguard services.

The overall project includes the demolition of the existing lifeguard station and construction of a new, three-story, lifeguard station on the same site. Demolition and

removal of the existing lifeguard station was completed in 2013 to 2014 and construction of the new lifeguard station is expected to be completed in 2015 to 2016. The building contractor utilized excavators, backhoes, concrete saws, and jackhammers for demolishing the previous structure and has hauled the waste materials to an offsite landfill where it was separated into recycled content and waste. During the second year of construction (2014 to 2015) and in the same footprint as the old lifeguard station, the new lifeguard station is being constructed within and adjacent to the previous facility. Rough plumbing and electrical have been laid; the foundation has been poured and some of the steel structure has been erected. The new lifeguard facility is in an optimal location to provide lifeguard service to the community. The new, three-story, building will contain a lower level with beach access level public restrooms and showers, lifeguard lockers, and sewage pump room; a second level with two work stations, ready/observation room, kitchenette, restroom, and first aid station; and a third "observation" level (with a 270° view of the beach and nearby reef areas) with a single occupancy observation space, radio storage closet, and exterior catwalk. Interior stairs will link the floors. The existing below grade retaining walls will remain in place and new retaining walls will be constructed for a ramp from street level to the lower level for emergency vehicle beach access and pedestrian access to the lower level restrooms and showers. A 5.6 m (18.5 ft) wall will be located along the north end of the lower level. The walls will be designed for a minimum design life of 50 years and will not be undermined from ongoing coastal erosion. The walls will not be readily viewed from Coast Boulevard, the public sidewalks or the surrounding community. Enhanced paving, seating and viewing space, drinking fountains, adapted landscaping, and water efficient irrigation will also be included.

The City of San Diego has divided the demolition and construction activities are divided into phases:

- (1.) Mobilization and temporary facilities;
- (2.) Demolition and site clearing;
- (3.) Site preparation and utilities;
- (4.) Building foundation;
- (5.) Building shell;
- (6.) Building exterior;
- (7.) Building interior;
- (8.) Site improvements; and
- (9.) Final inspection and demobilization.

Demolition and construction of the new lifeguard station was initially estimated to take approximately 7 months (148 actual demolition and construction days) and be completed by December 15, 2013; however, demolition and construction did not start until later than previously planned in June 2013 and June 2014 due to the presence of nesting migratory birds (*i.e.*, Western seagulls [*Larus occidentalis*] and eggs/chicks). There were additional unexpected delays in the demolition due to unforeseen underground structures at the site making it impossible to finish the project by December 15, 2013 or 2014. The City of San Diego completed phases 1 to 4 during 2013 and 2014. During the 2013 to 2014 construction window, the temporary on-site tower was removed and two temporary towers were installed nearby (one about 500 m [1,640.4 ft] south of

the construction site and another about 1,000 m [3,280.8 ft] east of the construction site to serve citizens utilizing the beaches and ocean waters nearby. Construction of phases 5 to 9 would commence in June 2015, thereby necessitating a renewal of the previous IHA.

The notice of the final IHA for the City of San Diego's demolition and construction activities that was published in the **Federal Register** on July 8, 2013 (78 FR 40705) provides a detailed summary on phases 1 to 4 (*i.e.*, mobilization and temporary facilities, demolition and site clearing, site preparation and utilities, and building foundation). Phases 5 to 9 include (phases overlap in time):

## (5.) Building shell:

Pre-cast concrete panel walls, panel walls, rough carpentry and roof framing, wall board, cable railing, metal flashing, and roofing.

Equipment – crane, truck, fork lift, and hand/power tools.

Timeframe – Approximately 35 days.

This phase will be completed in 2015 and has a maximum source level of 100 dB.

## (6.) Building exterior:

Doors and windows, siding paint, light fixtures, and plumbing fixtures.

Equipment – truck, hand/power tools, and chop saw.

Timeframe – Approximately 4 weeks.

This phase will be completed in 2015 and has a maximum source level of 100 dB.

## (7.) Building interiors:

Walls, sewage lift station, rough and finish mechanical electrical plumbing structural (MEPS), wall board, door frames, doors and paint.

Equipment – truck, hand/power tools, and chop saw.

Timeframe – Approximately 37 days.

This phase will be completed in 2015 and has a maximum source level of 100 dB.

## (8.) *Site improvements*:

Modify storm drain, concrete seat walls, curbs, and planters, fine grade, irrigation, hardscape, landscape, hand rails, plaques, and benches.

Equipment – backhoe, truck, hand/power tools, concrete pump/truck, and fork lift.

Timeframe – Approximately 37 days.

This phase will be completed in 2015 and has a maximum source level of 110 dB.

# (9.) Final inspection and demobilization:

System testing, remove construction equipment, inspection, and corrections.

Equipment – truck, and hand/power tools.

Timeframe – Approximately 41 days.

This phase will be completed in 2015 and has a maximum source level of 100 dB.

The exact dates of the planned activities depend on logistics and scheduling.

Sound levels during all phases of the project would not exceed 110 dB re 20 μPa at five feet from the sound sources. The 110 dB estimate is based on equipment manufacturers' estimates obtained by the construction contractor. The City of San Diego utilized published or manufacturers' measurement data based on the proposed equipment (*i.e.*, a backhoe, dump truck, cement pump, air compressor, electric screw guns, jackhammers, concrete saw, chop saw, and hand tools) to be utilized on the project site. Operation of the equipment is the primary activity within the range of construction activities that is likely to affect marine mammals by potentially exposing them to in-air (*i.e.*, airborne or sub-aerial) noise. During the working day, the City of San Diego

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estimates there would be sound source levels above 90 dB re 20  $\mu$ Pa, including 65 days of 100 to 110 dB re 20  $\mu$ Pa at the construction site.

On average, pinnipeds will be about 30.5 meters (m) (100 feet [ft]) or more from the construction site with a potential minimum of about 15.2 m (50 ft). During 2013 and 2014, measured sound levels from the demolition equipment reaching the pinnipeds did not exceed approximately 90 dB re 20 µPa at the haul-out area closest to the demolition and construction and a peak of about 83 dB re 20 µPa at the mean hauling-out distance (30.5 m). The City of San Diego used the formula and online calculator on the website: http://sengpielaudio.com/calculator-distance.htm and measured distances from the sound source to determine the area of potential impacts from in-air sound. Table 1 of the City of San Diego's monitoring report provides mean sound and mean distance from sound sources by the type of equipment and monitoring location. The City of San Diego intends to continue to measure in-air background noise levels in the days immediately prior to, during, and after the construction activities.

Additional details regarding the proposed construction activities of the Children's Pool Lifeguard Station can be found in the City of San Diego's IHA application. The IHA application can also be found online at:

http://www.nmfs.noaa.gov/pr/permits/incidental/construction.htm.

# Description of Marine Mammals in the Specified Geographic Area of the Proposed Specified Activity

Three species of pinnipeds are known to or could occur in the Children's Pool proposed action area and off the Pacific coastline (see Table 1 below). Pacific harbor seals, California sea lions, and northern elephant seals are the three species of marine

mammals that occur and are likely to be found within the immediate vicinity of the activity area. Therefore, these three species are likely to be exposed to effects of the proposed specified activities. A variety of other marine mammals have on occasion been reported in the coastal waters off southern California. These include gray whales, killer whales, bottlenose dolphins, Steller sea lions, northern fur seals, and Guadalupe fur seals. However, none of these species have been reported to occur in the immediate proposed action area of the Children's Pool beach. Therefore, NMFS does not expect, and is not authorizing, incidental take of other marine mammal species from the proposed specified activities. Table 1 below identifies the cetacean and pinnipeds species, their habitat, and conservation status in the nearshore area of the general region of the proposed project area.

Table 1. The habitat, abundance, and conservation status of marine mammals inhabiting the general region of the action area in the Pacific Ocean off the southern coast of California.

Species	Habitat	Occurrence	Range	Best Population Estimate (Minimum) <sup>1</sup>	ESA <sup>2</sup>	MMPA <sup>3</sup>				
Mysticetes										
Gray whale (Eschrichtius robustus)	Coastal and shelf	Transient during season migrations	North Pacific Ocean, Gulf of California to Arctic – Eastern North Pacific stock	20,990 (20,125)	DL – Eastern Pacific stock EN – Western Pacific stock	NC – Eastern North Pacific stock D – Western North Pacific stock				
Odontocetes										
Killer whale (Orcinus orca)	Widely distributed	Varies on inter-annual basis	Cosmopolitan	354 (354) - West Coast Transient stock	NL EN – Southern resident population	NC D - Southern Resident and AT1 Transient populations				
Bottlenose dolphin (Tursiops truncatus)	Offshore, inshore, coastal, estuaries	Limited, small population within 1 km of shore	Tropical and temperate waters between 45° North and South	323 (290) – California Coastal stock	NL	NC				
Long-beaked common dolphin (Delphinus capensis)	Inshore	Common, more inshore distribution, year-round presence	Nearshore and tropical waters	107,016 (76,224) – California stock	NL	NC				
Pinnipeds										
Pacific harbor seal ( <i>Phoca</i> vitulina richardii)	Coastal	Common	Coastal temperate to polar regions in Northern Hemisphere	30,968 (27,348) – California stock	NL	NC				

Northern elephant seal (Mirounga angustirostris)	Coastal, pelagic when not migrating	Common	Eastern and Central North Pacific – Alaska to Mexico	179,000 (81,368) – California breeding stock	NL	NC
California sea lion (Zalophus californianus)	Coastal, shelf	Common	Eastern North Pacific Ocean  – Alaska to Mexico	296,750 (153,337) – U.S. stock	NL	NC
Steller sea lion (Eumetopias jubatus)	Coastal, shelf	Rare	North Pacific Ocean – Central California to Korea	72,223 (52,847) – Eastern U.S. stock	DL – Eastern U.S. stock EN – Western U.S. stock	D
Northern fur seal (Callorhinus ursinus)	Pelagic, offshore	Rare	North Pacific Ocean – Mexico to Japan	12,844 (6,722) – California stock	NL	NC – California stock
Guadalupe fur seal (Arctocephalus townsendi)	Coastal, shelf	Rare	California to Baja California, Mexico	7,408 (3,028) – Mexico to California	Т	D

NA = Not available or not assessed.

NMFS Marine Mammal Stock Assessment Reports

U.S. Endangered Species Act: EN = Endangered, T = Threatened, DL = Delisted, and NL = Not listed.

U.S. Marine Mammal Protection Act: D = Depleted, S = Strategic, and NC = Not classified.

The rocks and beaches at or near the Children's Pool in La Jolla, CA, are almost exclusively Pacific harbor seal hauling-out sites. On infrequent occasions, one or two California sea lions or a single juvenile northern elephant seal have been observed on the sand or rocks at or near the Children's Pool (i.e., breakwater ledge/rocks haul-out area, reef haul-out area, and Casa Beach haul-out area). These sites are not usual haul-out locations for California sea lions and/or northern elephant seals. The City of San Diego commissioned two studies of harbor seal abundance trends at the Children's Pool. Both studies reported that appearances of California sea lions and northern elephant seals are infrequent, but not rare at Children's Pool (Yochem and Stewart, 1998; Hanan, 2004; Hanan & Associates, 2011). During 2013, the City of San Diego observed one juvenile and three adult California sea lions and two juvenile northern elephant seals at the Children's Pool. During 2014, the City of San Diego observed 22 California sea lions (during 19 days) and 30 juvenile elephant seals (during 29 days) at the Children's Pool. Adult sea lions were also observed hauling out on rocks and cliffs near the Children's Pool.

#### Pacific Harbor Seal

Harbor seals are widely distributed in the North Atlantic and North Pacific. Two subspecies exist in the Pacific Ocean: *P. v. stejnegeri* in the western North Pacific near Japan, and *P. v. richardii* in the eastern North Pacific. The subspecies in the eastern North Pacific Ocean inhabits near-shore coastal and estuarine areas from Baja California,

Mexico, to the Pribilof Islands in Alaska. These seals do not make extensive pelagic migrations, but do travel 300 to 500 kilometers (km) (162 to 270 nautical miles [nmi]) on occasion to find food or suitable breeding areas (Herder, 1986; Harvey and Goley, 2011). Previous assessments of the status of harbor seals have recognized three stocks along the west coast of the continental U.S.: (1) California, (2) Oregon and Washington outer coast waters, and (3) inland waters of Washington. An unknown number of harbor seals also occur along the west coast of Baja California, at least as far south as Isla Asuncion, which is about 100 miles south of Punta Eugenia. Animals along Baja California are not considered to be a part of the California stock because it is not known if there is any demographically significant movement of harbor seals between California and Mexico and there is no international agreement for joint management of harbor seals. Harbor seal presence at haul-out sites is seasonal with peaks in abundance during their pupping and molting periods. Pupping and molting periods are first observed to the south and progress northward up the coast with time (e.g., January to May near San Diego, April to June in Oregon and Washington) (Jeffries, 1984; Jeffries, 1985; Huber et al., 2001; Hanan, 2004; Hanan & Associates, 2011).

In California, approximately 400 to 600 harbor seal haul-out sites are distributed along the mainland coast and on offshore islands, including intertidal sandbars and ledges, rocky shores and islets, and beaches (Harvey *et al.*, 1995; Hanan, 1996; Lowry *et al.*, 2008). Preferred haul-out sites are those that are protected from the wind and waves, and allow access to deep water for foraging (Perrin *et al.*, 2008). Of the known haul-out sites, 14 locations are rookeries (2 locations have multiple sites, for a total of 17 sites) on or near the mainland of California. The population of harbor seals has grown off the U.S.

west coast and has led to new haul-out sites being used in California (Hanan, 1996).

Harbor seals are one of the most common and frequently observed marine mammals along the coastal environment.

Harbor seals have been observed hauling-out and documented giving birth at the Children's Pool since the 1990's (Yochem and Stewart, 1998; Hanan & Associates, 2004). Pacific harbor seals haul-out year-round on beaches and rocks (i.e., breakwater ledge/rocks haul-out area, reef haul-out area, and Casa Beach haul-out area) below the lifeguard tower at Children's Pool. According to Yochem (2005), the Children's Pool beach site is used by harbor seals at all hours of the day and at all tides with the exception of occasional high tide/high swell events in which the entire beach is awash. It is one of the three known haul-out sites for this species in San Diego County. These animals have been observed in this area moving to/from the Children's Pool, exchanging with the rocky reef directly west of and adjacent to the breakwater and with Seal Rock, which is about 150 m (492 ft) west of the Children's Pool. Harbor seals have also been reported on the sandy beach just southwest of the Children's Pool. At low tide, additional space for hauling-out is available on the rocky reef areas outside the retaining wall and on beaches immediately southward. Haul-out times vary by time of year, from less than an hour to many hours. There have been no foraging studies at this site, but harbor seals have been observed in nearshore waters and kelp beds nearby, including La Jolla Cove.

The Children's Pool area is the only rookery in San Diego County and the only mainland rookery on the U.S. west coast between the border of Mexico and Point Mugu in Ventura County, CA (321.9 km [200 miles]). The number of harbor seals in this area has increased since 1979, and seals are documented to give birth on these beaches during

December through May (Hanan, 2004; Hanan & Associates, 2011). The official start to pupping season is December 15. Females in an advanced stage of pregnancy begin to show up on the Children's Pool beach by late October to early November. Several studies have identified harbor seal behavior and estimated harbor seal numbers including patterns of daily and seasonal area use (Yochem and Stewart, 1998; Hanan & Associates, 2011; Linder, 2011). Males, females, and pups (in season) of all ages and stages of development are observed at the Children's Pool and adjacent areas.

In southern California, a considerable amount of information is known about the movements and ecology of harbor seals, but population structure in the region is not as well known (Stewart and Yochem, 1994, 2000; Keper et al., 2005; Hanan & Associates, 2011). Linder (2011) suggests that this population moves along the California coast and the beach at Children's Pool is part of a "regional network of interconnected" haul-out and pupping sites. Harbor seals often haul-out in protected bays, inlets, and beaches (Reeves et al., 1992). At and near the Children's Pool, harbor seals haul-out on the sand, rocks, and breakwater base in numbers of 0 to 15 harbor seals to a maximum of about 150 to 250 harbor seals depending on the time of day, season, and weather conditions (Hanan, 2004, Hanan & Associates, 2011; Linder, 2011). Because space is limited behind the breakwater at the Children's Pool, Linder (2011) predicted that it is unlikely that numbers will exceed 250 harbor seals. Based on monitoring from a camera, Western Alliance for Nature (WAN) reported that during the month of May 2013 up to 302 harbor seals were documented resting on the Children's Pool beach at any given time, with additional harbor seals on the rocks and in the water (Wan, personal communication). Almost every day, except for weekends, over 250 individual harbor seals were present on the beach. During the months of September 2012 to January 2013, the average number of harbor seals on the beach varied from 83 to 120 animals before people entered the beach or when people were behind the rope. During this same period, when people were on the beach and/or across the rope, the average number of harbor seals varied from 7 to 27. The City of San Diego observed 12 counts totaling more than 200 and a maximum of 238 animals during the 2014 to 2015 construction window. The weather (*i.e.*, wind and/or rain) and the proximity of humans to the beach likely affect the presence of harbor seals on the beach.

Radio-tagging and photographic studies have revealed that only a portion of seals utilizing a hauling-out site are present at any specific moment or day (Hanan, 1996, 2005; Gilbert *et al.*, 2005; Harvey and Goley, 2011; and Linder, 2011). These radio-tagging studies indicate that harbor seals in Santa Barbara County haul-out about 70 to 90% of the days annually (Hanan, 1996). The City of San Diego expects harbor seals to behave similarly at the Children's Pool. Tagged and branded harbor seals from other haul-out sites have been observed by Dr. Hanan at the Children's Pool. For example, harbor seals with red-stained heads and coats, which are typical of some harbor seals in San Francisco Bay have been observed at Children's Pool, indicating that seals tagged at other locations and haul-out sites visit the site. A few seals have been tagged at the Children's Pool and there are no reports of these tagged animals at other sites (probably because of very low re-sighting efforts and a small sample size [10 individuals radio-tagged]), which may indicate a degree of site-fidelity (Yochem and Stewart, 1998). These studies further indicate that seals are constantly moving along the coast including to/from the offshore

islands and that there may be as many as 600 individual harbor seals using Children's Pool during a year, but certainly not all at one time.

The City of San Diego has fitted a polynomial curve to the number of expected harbor seals hauling-out at the Children's Pool by month (see Figure 1 of the IHA application and Figure 2 below) based on counts at the Children's Pool by Hanan (2004), Hanan & Associates (2011), Yochem and Stewart (1998), and the Children's Pool docents (Hanan, 2004). A three percent annual growth rate of the population was applied to Yochem and Stewart (1998) counts to normalize them to Hanan & Associates and docent counts in 2003 to 2004. Based on monitoring during 2013 to 2014, Dr. Hanan estimates that similar numbers of harbor seals hauling-out at Children's Pool during 2011 and would expect similar numbers in 2015 to 2016.

A complete count of all harbor seals in California is impossible because some are always away from the haul-out sites. A complete pup count (as is done for other pinnipeds in California) is also not possible because harbor seals are precocial, with pups entering the water almost immediately after birth. Population size is estimated by counting the number of seals ashore during the peak haul-out period (May to July) and by multiplying this count by a correction factor equal to the inverse of the estimated fraction of seals on land. Based on the most recent harbor seal counts (2009) and including a revised correction factor, the estimated population of harbor seals in California is 30,196 individuals (NMFS, 2011), with an estimated minimum population of 26,667 for the California stock of harbor seals. Counts of harbor seals in California increased from 1981 to 2004. The harbor seal is not listed under the ESA and the California stock is not considered depleted or strategic under the MMPA (Carretta *et al.*, 2010).

## California Sea Lion

The California sea lion is a full species, separate from the Galapagos sea lion (Zalophus wollebaeki) and the extinct Japanese sea lion (Zalophus japonicus) (Brunner, 2003; Wolf et al., 2007; Schramm et al., 2009). This species of sea lion is found from southern Mexico to southwestern Canada. The breeding areas of the California sea lion are on islands located in southern California, western Baja California, and the Gulf of California. A genetic analysis of California sea lions identified five genetically distinct geographic populations: (1) Pacific Temperate, (2) Pacific Subtropical, (3) Southern Gulf of California, (4) Central Gulf of California, and (5) Northern Gulf of California (Schramm et al., 2009). In that study, the Pacific Temperate population included rookeries within U.S. waters and the Coronados Islands just south of U.S./Mexico border. Animals from the Pacific Temperate population range north into Canadian waters, and movement of animals between U.S. waters and Baja California waters has been documented, though the distance between the major U.S. and Baja California rookeries is at least 740.8 km (400 nmi). Males from western Baja California rookeries may spend most of the year in the United States.

The entire California sea lion population cannot be counted because all age and sex classes are never ashore at the same time. In lieu of counting all sea lions, pups are counted during the breeding season (because this is the only age class that is ashore in its entirety), and the numbers of births is estimated from the pup count. The size of the population is then estimated from the number of births and the proportion of pups in the population. Censuses are conducted in July after all pups have been born. There are no rookeries at or near the Children's Pool, although in the past two years births have been

reported at La Jolla Cove (about 0.75 km [0.47 miles] east of Children's Pool).

Population estimates for the U.S. stock of California sea lions range from a minimum of 153,337 to an average estimate of 296,750 animals. They are considered to be at carrying capacity of the environment. The California sea lion is not listed under the ESA and the U.S. stock is not considered depleted or strategic under the MMPA.

## Northern Elephant Seal

Northern elephant seals breed and give birth in California (U.S.) and Baja California (Mexico), primarily on offshore islands (Stewart *et al.*, 1994) from December to March (Stewart and Huber, 1993). Spatial segregation in foraging areas between males and females is evident from satellite tag data (Le Beouf *et al.*, 2000). Males migrate to the Gulf of Alaska and western Aleutian Islands along the continental shelf to feed on benthic prey, while females migrate to pelagic areas in the Gulf of Alaska and the central North Pacific to feed on pelagic prey (Le Beouf *et al.*, 2000). Adults return to land between March and August to molt, with males returning later than females. Adults return to their feeding areas again between their spring/summer molting and their winter breeding seasons.

Populations of northern elephant seals in the U.S. and Mexico have recovered after being nearly hunted to extinction (Stewart *et al.*, 1994). Northern elephant seals underwent a severe population bottleneck and loss of genetic diversity when the population was reduced to an estimated 10 to 30 individuals (Hoelzel *et al.*, 2002). However, movement and genetic exchange continues between rookeries when they start breeding (Huber *et al.*, 1991). The California breeding population is now

demographically isolated from the Baja California population. The California breeding population is considered in NMFS's stock assessment report to be a separate stock.

A complete population count of elephant seals is not possible because all age classes are not ashore simultaneously. Elephant seal population size is typically estimated by counting the number of pups produced and multiplying by the inverse of the expected ratio of pups to total animals (McCann, 1985). Based on counts of elephant seals at U.S. rookeries in 2010, Lowry et al. (2014) reported that 40,684 pups were born. Lowry et al. (2014) applied a multiplier of 4.4 to extrapolate from total pup counts to a population estimate of approximately 179,000 elephant seals. This multiplier is derived from life tables based on published elephant seal fecundity and survival rates, and reflects a population with approximately 23% pups (Cooper and Stewart, 1983; Le Boeuf and Reiter, 1988; Hindell 1991; Huber et al., 1991; Reiter and Le Boeuf, 1991; Clinton and Le Boeuf, 1993; Le Boeuf et al., 1994; Pistorius and Bester, 2002; McMahon et al., 2003; Pistorius et al., 2004; Condit et al., 2014). The minimum population size for northern elephant seals in 2010 can be estimated very conservatively as 81,368, which is equal to twice the observed pup count (to account for the pups and their mothers). The population is reported to have grown at 3.8% annually since 1988 (Lowry et al., 2014). Northern elephant seals are not listed under the ESA and are not considered as depleted or a strategic stock under the MMPA.

Further information on the biology and local distribution of these marine mammal species and others in the region can be found in the City of San Diego's IHA application, which is available upon request (see **ADDRESSES**), and the NMFS Marine Mammal Stock Assessment Reports, which are available online at:

http://www.nmfs.noaa.gov/pr/sars/.

# **Potential Effects of the Proposed Specified Activity on Marine Mammals**

This section includes a summary and discussion of the ways that the types of stressors associated with the proposed specified activity (e.g., construction equipment and activities) have been observed to impact marine mammals. This discussion may also include reactions that we consider to rise to the level of a take and those that we do not consider to rise to the level of take (for example, with acoustics), we may include a discussion of studies that showed animals not reacting at all to sound or exhibiting barely measureable avoidance). This section is intended as a background of potential effects and does not consider either the specific manner in which this activity will be carried out or the mitigation that will be implemented, or how either of those will shape the anticipated impacts from this specific activity. The "Estimated Take by Incidental Harassment" section later in this document will include a quantitative analysis of the number of individuals that are expected to be taken by this activity. The "Negligible Impact Analysis" section will include the analysis of how this specific activity will impact marine mammals and will consider the content of this section, the "Estimated Take by Incidental Harassment" section, the "Proposed Mitigation" section, and the "Anticipated Effects on Marine Mammal Habitat" section to draw conclusions regarding the likely impacts of this activity on the reproductive success or survivorship of individuals and from that on the affected marine mammal populations or stocks.

When considering the influence of various kinds of sound on the marine environment, it is necessary to understand that different kinds of marine life are sensitive to different frequencies of sound. Based on available behavioral data, audiograms have

been derived using auditory evoked potentials, anatomical modeling, and other data, Southall *et al.* (2007) designate "functional hearing groups" for marine mammals and estimate the lower and upper frequencies of functional hearing of the groups. The functional groups and the associated frequencies are indicated below (though animals are less sensitive to sounds at the outer edge of their functional range and most sensitive to sounds of frequencies within a smaller range somewhere in the middle of their functional hearing range):

- Low-frequency cetaceans (13 species of mysticetes): functional hearing is estimated to occur between approximately 7 Hz and 30 kHz;
- Mid-frequency cetaceans (32 species of dolphins, six species of larger toothed whales, and 19 species of beaked and bottlenose whales): functional hearing is estimated to occur between approximately 150 Hz and 160 kHz;
- High-frequency cetaceans (eight species of true porpoises, six species of river dolphins, *Kogia* spp., the franciscana (*Pontoporia blainvillei*), and four species of cephalorhynchids): functional hearing is estimated to occur between approximately 200 Hz and 180 kHz; and
- Phocid pinnipeds in water: functional hearing is estimated to occur between approximately 75 Hz and 100 kHz;
- Otariid pinnipeds in water: functional hearing is estimated to occur between approximately 100 Hz and 40 kHz.

As mentioned previously in this document, 3 marine mammal species (0 cetacean and 3 pinniped species) are likely to occur in the proposed action area. Of the 3 pinniped species likely to occur in the City of San Diego's proposed action area, 2 are classified as

phocid pinnipeds (*i.e.*, Pacific harbor seal and northern elephant seal) and, 1 is classified as an otariid pinniped (*i.e.*, California sea lion) (Southall *et al.*, 2007). The City of San Diego requests authorization for Level B harassment of these 3 species of marine mammals (*i.e.*, Pacific harbor seals, California sea lions, and northern elephant seals) incidental to the use of equipment and its propagation of in-air noise from various acoustic mechanisms associated with the construction activities of the Children's Pool Lifeguard Station at La Jolla, CA discussed above. NMFS considers a species' functional hearing group when we analyze the effects of exposure to sound on marine mammals.

The notice of the proposed IHA (79 FR 8160, February 11, 2014) included a discussion of the effects of in-air sounds from construction activities on pinnipeds, which included tolerance, behavioral disturbance, and hearing impairment. NMFS refers readers to the City of San Diego's IHA application and NMFS's EA for additional information on the behavioral reactions (or lack thereof) by all types of marine mammals to high levels of in-air sounds.

The potential effects to marine mammals described in this section of the document generally do not take into consideration the monitoring and mitigation measures described later in this document (see the "Proposed Mitigation" and "Proposed Monitoring and Reporting" sections), which are designed to effect the least practicable impact on affected marine mammal species or stocks.

#### **Anticipated Effects on Marine Mammal Habitat**

The rocks and beaches at or near the Children's Pool in La Jolla, CA, are almost exclusively Pacific harbor seal hauling-out sites. Harbor seals have been observed

hauling-out and documented giving birth at the Children's Pool since the 1990's (Yochem and Stewart, 1998; Hanan & Associates, 2004). It is one of the three known haul-out sites for this species in San Diego County and is the only rookery in San Diego County and the only mainland rookery on the U.S. west coast between the border of Mexico and Point Mugu in Ventura County, CA. More information on this population of Pacific harbor seals can be found in the "Description of Marine Mammals in the Specified Geographic Area of the Proposed Specified Activity."

The primary anticipated adverse impacts upon habitat consist of temporary changes to the in-air acoustic environment, as detailed in the notice of the proposed IHA (79 FR 8160, February 11, 2014). These changes are minor, temporary, and limited in duration to the period of the construction activities. The temporary impacts on the acoustic environment are not expected to have any permanent effects on the species or stock populations of marine mammals occurring at the Children's Pool.

All proposed construction activities are beyond or outside the habitat areas where harbor seals and other pinnipeds are found. Visual barriers would be erected to shield construction activities from the visual perception and potentially dampen acoustic effects on pinnipeds. Because the public occasionally harasses the harbor seals with various activities, the NMFS-qualified PSO monitoring the site would make observations and attempt to distinguish and attribute any observed harassment to the public or to the proposed construction activities and give all details in the observation report. If any short-term, temporary impacts to habitat due to sounds or visual presence of equipment and workers did occur, the City of San Diego would expect pinniped behavior to return to

pre-construction conditions soon after the activities are completed, which is anticipated to occur before the next pupping season (Hanan & Associates, 2011).

The area of habitat affected is small and the effects are localized and temporary; thus there is no reason to expect any significant reduction in habitat available for foraging and other habitat uses. No aspect of the project is anticipated to have any permanent effect on the location or use of pinniped haul-outs or related habitat features in the area (Hanan & Associates, 2011). Further, the site is already very disturbed by member of the public who come to the area during the day and night to view the pinnipeds. The City of San Diego and NMFS do not project any loss or modification of physical habitat for these species. Any potential temporary loss or modification of habitat due to in-air noise or visual presence of equipment and workers during the proposed construction activities is expected by the City of San Diego and NMFS to be quickly restored after construction activities end and all equipment and barriers are removed.

For these reasons, NMFS anticipates that the proposed action would result in no impacts to marine mammal habitat beyond rendering the areas immediately around the Children's Pool less desirable during construction activities.

#### **Proposed Mitigation**

In order to issue an Incidental Take Authorization (ITA) under section 101(a)(5)(D) of the MMPA, NMFS must prescribe, where applicable, the permissible methods of taking pursuant to such activity, and other means of effecting the least practicable impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for taking for certain subsistence uses (where relevant).

The City of San Diego has established the Children's Pool as a shared beach for pinnipeds and people (except during pupping season when the beach has been closed to the public). In the past, during the pupping season, a rope was placed along the upper part of the beach with signage to inform and designate how close people can come to the haul-out area and the pinnipeds. The timeframe for the rope has been extended so that it is now present year-round. The construction activities are planned to occur outside the harbor seal pupping and weaning periods.

The City of San Diego would implement the following proposed mitigation measures to help ensure the least practicable impact on marine mammals:

- (1) Prohibition of construction during pupping season;
- (2) Daily construction timing;
- (3) Construction of visual and acoustic barriers:
- (4) Use of Protected Species Observers;
- (5) Establishment of buffer zones; and
- (6) Potential abandonment survey.

Visual and acoustic barriers were constructed in 2013 to mitigate the effects of the construction activities. The visual and acoustic barriers were constructed of plywood, 1.2 to 2.4 m (4 to 8 ft) tall stood on end and held up by wood posts. The sheets of plywood were stood upright and held up with two wooden two by fours hinged to the top of the frame, so they could be collapsed and moved depending on the location and need for access by demolition and construction equipment. The barriers were placed at the site with input from NMFS Southwest Regional Office (SWRO) personnel so that they will hide as advantageously as possible the construction activities that may be seen by

pinnipeds. The barriers appear to dampen the acoustic sound sources, but do not prevent sound from permeating the environment. The barriers also appear to hide and reduce visual cues that may stimulate behavioral reactions from the pinnipeds on the beach below. As the site is a beach with construction along the cliff and on flat areas above the cliff, a complete barrier cannot be constructed to hide all construction activities for the project. Once the walls of the lifeguard station's building are in place, much of the construction activities will take place above the Children's Pool beach (*i.e.*, out of sight) as well as inside the building (*i.e.*, a visual and partial sound barrier). There would be no activities in the ocean or closer to the water's edge and since harbor seals mate underwater in the ocean, there will be no impacts on mating activities. California sea lions and northern elephant seals are such infrequent users of this area and their rookeries are so far away (at least 104.6 km [65 miles] at offshore islands) that there will be no adverse impact on these species.

As part of the public comment process for the issuance of the previous 2013 IHA, NMFS modified several of the monitoring and mitigation measures included in the proposed IHA (78 FR 25958, May 3, 2013) for practicability reasons, and also included several additional measures in the final IHA (78 FR 40705, July 8, 2013). These included changing the pupping season from December 15<sup>th</sup> to May 15<sup>th</sup> and prohibiting construction activities during this time; extending construction activities from 7:00 a.m. to 7:00 p.m. to help assure that more work would be completed during the 2013 construction window; continuing monitoring for 60 days following the end of construction activities; and triggering a shut-down of construction activities in the unexpected event of abandonment of the Children's Pool site. The mitigation measure on

scheduling the heaviest construction activities (with the highest sound levels) during the annual period of lowest haul-out occurrence (October to November) was originally included in the City of San Diego's Mitigated Negative Declaration when it was anticipated that the City of San Diego would obtain an IHA in the summer of 2012 and begin demolition and construction activities in the fall of 2012. This requirement has been removed because it is no longer practicable due to logistics, scheduling and to allow the planned activities to be completed before the next pupping season.

The activities proposed by the applicant includes a variety of measures calculated to minimize potential impacts on marine mammals, including:

Prohibition of Construction during Pupping Season

Construction shall be prohibited during the Pacific harbor seal pupping season (December 15<sup>th</sup> to May 15<sup>th</sup>) and for an additional two weeks thereafter to accommodate lactation and weaning of late season pups. Thus, construction shall be prohibited from December 15<sup>th</sup> to June 1<sup>st</sup>.

Daily Construction Timing

Construction activities shall be scheduled, to the maximum extent practicable, during the daily period of lowest haul-out occurrence, from approximately 8:30 a.m. to 3:30 p.m. However, construction activities may be extended from 7 a.m. to 7 p.m. to help assure that the project can be completed during the 2015 construction window. Harbor seals typically have the highest daily or hourly haul-out period during the afternoon from 3 p.m. to 6 p.m.

Construction of Visual and Acoustic Barriers

A visual and acoustic barrier would be erected and maintained for the duration of the project to shield construction activities from beach view. The temporary barrier shall consist of 1/2 to 3/4 inch (1.3 to 1.9 centimeters [cm]) plywood constructed 1.8 to 2.4 m (6 to 8 ft) high depending on the location. The City of San Diego does not believe that a complete barrier can be constructed to hide all of the proposed construction activities. Once the walls of the lifeguard station building are in place, much of the proposed construction activities would take place on the bluff above the beach (thus out of sight) and inside the building, which would provide a visual and partial sound barrier.

# **Protected Species Observers**

Trained PSOs would be used to detect, document, and minimize impacts (i.e., possible shut-down of noise-generating operations [turning off the equipment so that inair sounds associated with construction no longer exceed levels that are potentially harmful to marine mammals]) to marine mammals. More information about this measure is contained in the "Proposed Monitoring" section (below).

# Establishment of Buffer Zones

The City of San Diego shall establish buffer zones (i.e., where sound pressure levels are at or above 90 dB re 20  $\mu$ Pa for harbor seals and/or at or above 100 dB re 20  $\mu$ Pa for all pinniped species except harbor seals [for in-air noise]) around the construction activities so that in-air sounds associated with the construction activities no longer exceed levels that are potentially harmful to marine mammals.

## Timing Constraints for In-Air Noise

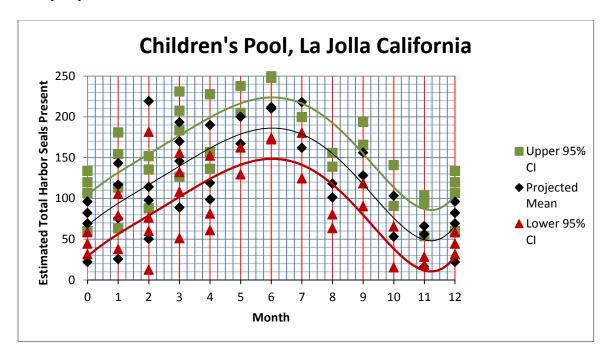
To minimize in-air noise impacts on marine mammals, construction activities shall be limited to the period when the species of concern would be least likely to be in

the project area. The construction window for construction activities shall be from June 1 to December 15, 2015. The IHA may extend to June 1 through June 27, 2016 to finish the construction activities if needed. Avoiding periods when the highest number of marine mammal individuals are in the action area is another mitigation measure to protect marine mammals from the proposed construction activities.

## Potential Abandonment Survey

After the first two months of monitoring during construction activities, the City of San Diego will take the mean number of observed harbor seals at the Children's Pool in a 24-hour period across that two months and compare it to the mean of the lower 95 percent confidence interval in Figure 1 (see below). If the observed mean is lower, the City of San Diego would shut-down construction activities and work with NMFS and other harbor seal experts (e.g., Mark Lowry, Dr. Sarah Allen, Dr. Pamela Yochem, and/or Dr. Brent Stewart) to develop and implement a revised mitigation plan to further reduce the number of takes and potential impacts. Once a week every week thereafter, the City of San Diego will take the same mean of observed harbor seals across the previous three tide cycles (a tide cycle is approximately 2 weeks) and compare it to the 95% lower confidence interval in Figure 1 for the same time period. If the observed mean is lower, the City of San Diego would shut-down and take the action described above. If abandonment of the site is likely, monitoring would be expanded away from the Children's Pool to determine if animals have been temporarily displaced to known haulout sites in the southern California area (e.g., north end of Torrey Pines, cave on the exposed ocean side of Point Loma, etc.). For the purpose of this action, NMFS will consider the Children's Pool site to possibly be abandoned if zero harbor seals are present each day during the daytime and nighttime hours for at least three tide cycles (a tide cycle is approximately 2 weeks), but this cannot be confirmed until observations continue to be zero during a full pupping and molting season.

Figure 1. Estimated total harbor seals by month based on counts at the site by Hanan & Associates, Yochem and Stewart, and Children's Pool docents. The polynomial curve fits to counts by months, which includes the projected mean as well as the upper 95% and lower 95% confidence intervals, was used to estimate harbor seals expected to be hauledout by day.



More information regarding the City of San Diego's monitoring and mitigation measures for the proposed construction activities at the Children's Pool Lifeguard Station can be found in the IHA application.

#### **Proposed Mitigation Conclusions**

NMFS has carefully evaluated the applicant's mitigation measures and considered a range of other measures in the context of ensuring that NMFS prescribes the means of effecting the least practicable impact on the affected marine mammal species and stocks and their habitat. NMFS's evaluation of potential measures included consideration of the following factors in relation to one another:

- The manner in which, and the degree to which, the successful implementation of the measure is expected to minimize adverse impacts to marine mammals;
- The proven or likely efficacy of the specific measure to minimize adverse impacts as planned; and
- The practicability of the measure for applicant implementation, including consideration of personnel safety, practicality of implementation, and impact on the effectiveness of the activity.

Any mitigation measure(s) prescribed by NMFS should be able to accomplish, have a reasonable likelihood of accomplishing (based on current science), or contribute to the accomplishment of one or more of the general goals listed below:

- (1) Avoidance or minimization of injury or death of marine mammals wherever possible (goals 2, 3, and 4 may contribute to this goal).
- (2) A reduction in the numbers of marine mammals (total number or number at biologically important time or location) exposed to received levels from construction equipment, or other activities expected to result in the take of marine mammals (this goal may contribute to 1, above, or to reducing harassment takes only).
- (3) A reduction in the number of times (total number or number at biologically important time or location) individuals would be exposed to received levels from construction equipment, or other activities expected to result in the take of marine mammals (this goal may contribute to 1, above, or to reducing harassment takes only).
- (4) A reduction in the intensity of exposures (either total number or number at biologically important time or location) to received levels from construction equipment, or other activities expected to result in the take of marine mammals (this goal may contribute to a, above, or to reducing the severity of harassment takes only).
- (5) Avoidance of minimization of adverse effects to marine mammal habitat, paying special attention to the food base, activities that block or limit passage to or from biologically important areas, permanent destruction of habitat, or temporary destruction/disturbance of habitat during a biologically important time.
- (6) For monitoring directly related to mitigation an increase in the probability of detecting marine mammals, thus allowing for more effective implementation of the mitigation.

Based on NMFS's evaluation of the applicant's proposed measures, as well as other measures considered by NMFS or recommended by the public, NMFS has

determined that the mitigation measures provide the means of effecting the least practicable impact on marine mammal species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance.

### **Proposed Monitoring and Reporting**

In order to issue an ITA for an activity, section 101(a)(5)(D) of the MMPA states that NMFS must, where applicable, set forth "requirements pertaining to the monitoring and reporting of such taking." The MMPA implementing regulations at 50 CFR 216.104 (a)(13) require that requests for ITAs include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present in the proposed action area.

Monitoring measures prescribed by NMFS should accomplish one or more of the following general goals:

- (1) An increase in the probability of detecting marine mammals, both within the mitigation zone (thus allowing for more effective implementation of the mitigation) and in general to generate more data to contribute to the analyses mentioned below;
- (2) An increase in our understanding of how many marine mammals are likely to be exposed to levels from construction equipment that we associate with specific adverse effects, such as behavioral harassment, TTS or PTS;
- (3) An increase in our understanding of how marine mammals respond to stimuli expected to result in take and how anticipated adverse effects on individuals (in different ways and to varying degrees) may impact the population, species, or stock (specifically through effects on annual rates of recruitment or survival) through any of the

following methods:

- Behavioral observations in the presence of stimuli compared to observations in the absence of stimuli (need to be able to accurately predict received level, distance from source, and other pertinent information);
- Physiological measurements in the presence of stimuli compared to observations in the absence of stimuli (need to be able to accurately predict receive level, distance from the source, and other pertinent information);
- Distribution and/or abundance comparisons in times or areas with concentrated stimuli versus times or areas without stimuli;
  - (4) An increased knowledge of the affected species; and
- (5) An increase in our understanding of the effectiveness of certain mitigation and monitoring measures.

# **Proposed Monitoring**

The City of San Diego has developed a monitoring plan (see Appendix I, Mitigated Negative Declaration in the IHA application) based on discussions between the project biologist, Dr. Doyle Hanan, and NMFS biologists. The plan has been vetted by City of San Diego planners and reviewers. The plan has been formally presented to the public for review and comment. The City of San Diego has responded in writing and in public testimony (see City of San Diego Council Hearing, December 14, 2011) to all public concerns.

The monitoring plan involves surveying prior to construction activities, monitoring during construction activities by NMFS-approved PSOs with high-resolution binoculars and handheld digital sound level meters (measuring devices in the 30 to 130

dB re 20 µPa range), and post-construction monitoring. The City of San Diego would include sound measurements at and near the construction site in their initial survey prior to the activities as a background and baseline for the project. While no specific acoustic study is planned, the City of San Diego's Mitigated Negative Declaration states that marine mammal monitoring shall be conducted for three to five days prior to construction and shall include hourly systematic counts of pinnipeds using the beach, Seal Rock, and associated reef areas. Monitoring three to five days prior to construction will provide baseline data regarding recent haul-out behavior and patterns as well as background noise levels near the time of the proposed construction activities.

During the proposed construction activities, monitoring shall assess behavior and potential behavioral responses to construction noise and activities. PSOs would observe the proposed construction activities from a station along the breakwater wall and from the base of the cliff below the construction area. PSOs would be on site approximately 30 minutes before the start of proposed construction activities and would remain on site until 30 minutes after activities have ceased. Visual digital recordings and photographs shall be used to document individuals and behavioral responses to construction. The City of San Diego (*i.e.*, PSOs) plans to make hourly counts of the number of pinnipeds present and record sound or visual events that result in behavioral responses and changes, whether during construction or from public stimuli. During these events, pictures and video will also be taken when possible. The "Mitigated Negative Declaration" states "monitoring shall assess behavior and potential behavioral responses to construction noise and activities. Visual digital recordings and photographs shall be used to document individuals and behavioral responses to construction."

Monitors would have authority to stop construction as necessary depending on sound levels, pinniped presence, and distance from sound sources. Daily monitoring reports would be maintained for periodic summary reports to the City of San Diego and to NMFS. Observations would be entered into and maintained on Hanan & Associates computers. The City of San Diego plans to follow the reporting requirements in the Mitigated Negative Declaration, which states that "the biologist shall document field activity via the Consultant Site Visit Record. The Consultant Site Visit Record shall be either e-mailed or faxed to the City of San Diego's Mitigation Monitoring Coordination process (MMC) on the 1<sup>st</sup> day of monitoring, the 1<sup>st</sup> week of each month, the last day of monitoring, and immediately in the case of any undocumented discovery. The project biologist shall submit a final construction monitoring report to MMC within 30 days of construction completion." The MMC "coordinates the monitoring of development projects and requires that changes are approved and implemented to be in conformance with the permit requirements and to minimize any damage to the environment." These documents will also be sent to NMFS. Finally, the City of San Diego has modified its monitoring program to include 60 days of monitoring post-construction activities. Following construction, the City of San Diego would have a program of onsite PSOs that would randomly select a day per week to monitor.

NMFS notes that the WAN's La Jolla Harbor Seal Webcam was attached to the old (now demolished) lifeguard station and is no longer available online (http://www.wanconservancy.org/la\_jolla\_harbor\_seal\_earthcam.htm). The City of San Diego has stated that there is no suitable place to mount the camera at the construction site. Therefore, the City of San Diego cannot do periodic checks using the webcam for

monitoring purposes as required by the 2013 IHA. However, the camera was not expected to replace NMFS-qualified PSOs at the site making accurate counts, measuring sound levels and observing the public and the construction, as well as the harbor seals. In the old camera view, a person may have been able to see visual evidence of Level B harassment but probably would not have been able to distinguish between harassment from construction activities and harassment from the public since the camera had a limited scope and only showed the Children's Pool beach and pinnipeds (usually a specific portion of the beach, but not the reef nor nearby beaches).

Consistent with NMFS procedures, the following marine mammal monitoring and reporting shall be performed for the proposed action:

- (1) The PSO shall be approved by NMFS prior to construction activities.
- (2) The NMFS-approved PSO shall attend the project site prior to, during, and after construction activities cease each day throughout the construction window.
- (3) The PSO shall search for marine mammals within the Children's Pool area.
- (4) The PSO shall be present during construction activities to observe for the presence of marine mammals in the vicinity of the specified activity. All such activity would occur during daylight hours (*i.e.*, 30 minutes after sunrise and 30 minutes before sunset). If inclement weather limits visibility within the area of effect, the PSO would perform visual scans to the extent conditions allow.
- (5) If marine mammals are sighted by the PSO within the acoustic threshold areas, the PSO shall record the number of marine mammals within the area of effect and the duration of their presence while the noise-generating activity is occurring. The PSO

would also note whether the marine mammals appeared to respond to the noise and, if so, the nature of that response. The PSO shall record the following information: date and time of initial sighting, tidal stage, weather conditions, Beaufort sea state, species, behavior (activity, group cohesiveness, direction and speed of travel, etc.), number, group composition, distance to sound source, number of animals impacted, construction activities occurring at time of sighting, and monitoring and mitigation measures implemented (or not implemented). The observations would be reported to NMFS.

(6) A final report would be submitted summarizing all in-air acoustic effects from construction activities and marine mammal monitoring during the time of the authorization, and any long term impacts from the project.

A written log of dates and times of monitoring activity will be kept. The log shall report the following information:

- Time of observer arrival on site:
- Time of the commencement of in-air noise generating activities, and description of the activities;
  - Distances to all marine mammals relative to the sound source;
- Distances from the sound meter to each sound-producing activity when conducting sound measurements;
- For harbor seal observations, notes on seal behavior during noisegenerating activity, as described above, and on the number and distribution of seals observed in the project vicinity;
- For observations of all marine mammals other than harbor seals, the time and duration of each animal's presence in the project vicinity; the number of animals

observed; the behavior of each animal, including any response to noise-generating activities;

- Time of the cessation of in-air noise generating activities; and
- Time of observer departure from site.

All monitoring data collected during construction would be included in the biological monitoring notes to be submitted. A final report summarizing the construction monitoring and any general trends observed would also be submitted to NMFS within 90 days after monitoring has ended during the period of the lifeguard station construction.

Proposed Reporting

The City of San Diego would notify NMFS Headquarters and the NMFS Southwest Regional Office prior to initiation of the construction activities. A draft final report must be submitted to NMFS within 90 days after the conclusion of the construction activities of the Children's Pool Lifeguard Station. The report would include a summary of the information gathered pursuant to the monitoring requirements set forth in the IHA, including dates and times of operations and all marine mammal sightings (dates, times, locations, species, behavioral observations [activity, group cohesiveness, direction and speed of travel, etc.], tidal stage, weather conditions, Beaufort sea state and wind force, associated construction activities). A final report must be submitted to the Regional Administrator within 30 days after receiving comments from NMFS on the draft final report. If no comments are received from NMFS, the draft final report would be considered to be the final report.

While the IHA does not authorize injury (*i.e.*, Level A harassment), serious injury, or mortality, should the applicant, contractor, monitor or any other individual

associated with the construction project observe an injured or dead marine mammal, the incident (regardless of cause) will be reported to NMFS as soon as practicable. The report should include species or description of animal, condition of animal, location, time first found, observed behaviors (if alive) and photo or video, if available.

In the unanticipated event that the City of San Diego discovers a live stranded marine mammal (sick and/or injured) at Children's Pool, they shall immediately contact Sea World's stranded animal hotline at 1-800-541-7235. Sea World shall also be notified if a dead stranded pinniped is found so that a necropsy can be performed. In all cases, NMFS shall be notified as well, but for immediate response purposes, Sea World shall be contacted first.

Reporting Prohibited Take - In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by this IHA, such as an injury (Level A harassment), serious injury, or mortality, the City of San Diego shall immediately cease the specified activities and immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by e-mail to Jolie.Harrison@noaa.gov,

*Howard.Goldstein@noaa.gov*, and the West Coast Regional Stranding Coordinator (562-980-3230). The report must include the following information:

- Time, date, and location (latitude/longitude) of the incident;
- The type of activity involved;
- Description of the circumstances during and leading up to the incident;

- Status of all sound source use in the 24 hours preceding the incident; water depth; environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, and visibility);
- Description of marine mammal observations in the 24 hours preceding the incident; species identification or description of the animal(s) involved;
- The fate of the animal(s); and photographs or video footage of the animal (if equipment is available).

Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS shall work with the City of San Diego to determine the action necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. The City of San Diego may not resume its activities until notified by NMFS via letter, e-mail, or telephone.

Reporting an Injured or Dead Marine Mammal with an Unknown Cause of Death - In the event that the City of San Diego discovers an injured or dead marine mammal, and the lead PSO determines that the cause of the injury or death is unknown and the death is relatively recent (i.e., in less than a moderate state of decomposition as described in the next paragraph), the City of San Diego would immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401, and/or by e-mail to Jolie.Harrison@noaa.gov, Howard.Goldstein@noaa.gov, and the NMFS West Coast Regional Office (1-866-767-6114), and/or to the West Coast Regional Stranding Coordinator (562-980-3230). The report must include the same information identified above. Activities may continue

while NMFS reviews the circumstances of the incident. NMFS would work with the City of San Diego to determine whether modification of the activities is appropriate.

Reporting an Injured or Dead Marine Mammal Not Related to the Activities - In the event that the City of San Diego discovers an injured or dead marine mammal, and the lead PSO determines that the injury or death is not associated with or related to the activities authorized (e.g., previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), the City of San Diego shall report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401, and/or by e-mail to Jolie.Harrison@noaa.gov, Howard.Goldstein@noaa.gov, and the NMFS West Coast Regional Office (1-866-767-6114) and/or to the West Coast Regional Stranding Coordinator (562-980-3230) within 24 hours of the discovery. The City of San Diego shall provide photographs or video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network. Activities may continue while NMFS reviews the circumstances of the incident.

Monitoring Results from Previously Authorized Activities

2013 to 2014

Hanan & Associates, Inc., on behalf of the City of San Diego, conducted marine mammal and in-air sound monitoring at six locations during demolition and construction activities at the Children's Pool Lifeguard Station in La Jolla, California from June 3, 2013 to February 12, 2014. Demolition and construction activities began on July 10, 2013 and were halted for the Pacific harbor seal pupping season (December 15, 2013 to June 1, 2014). During 115 days of visual and acoustic observations, Hanan & Associates

counted a total of 61,631 Pacific harbor seals and 26,037 people. During the 2013 demolition and construction activities, Hanan & Associates observed a total of 15,673 takes by Level B harassment (*i.e.*, alerts, movements, and flushes) that could be attributed to demolition and construction activities (5,095 takes), the general public (8,639 takes), and other sources (1,939 takes). As of April 15, 2014, at least 60 harbor seal pups (including 2 still births) have been born at the Children's Pool and there has been no indication of abandonment. In addition to the Pacific harbor seal sightings, PSOs recorded 11 sightings of cetaceans (gray whales and bottlenose dolphins), 4 sightings of California sea lions (1 juvenile, 3 adult), and 2 northern elephant seals (both juveniles) at the Children's Pool.

Hanan & Associates recorded mean in-air sound levels of 69.2 dB re 20  $\mu$ Pa (range of 55.6 to 93.7 dB re 20  $\mu$ Pa) during non-demolition and construction activities and 70.3 dB re 20  $\mu$ Pa (range of 50.7 to 103.1 dB re 20  $\mu$ Pa) during demolition and construction activities. During 2013, measured sound levels from the demolition equipment reaching the pinnipeds did not exceed approximately 90 dB re 20  $\mu$ Pa at the haul-out area closest to the demolition and construction activities, nor did they exceed a peak of about 83 dB re 20  $\mu$ Pa at the mean hauling-out distance (30.5 m).

Hanan & Associates, Inc., on behalf of the City of San Diego, conducted marine mammal and in-air sound monitoring at seven locations during demolition and construction activities at the Children's Pool Lifeguard Station in La Jolla, California from August 6, 2014 to March 15, 2015. Construction activities began on August 6, 2014 and were halted for the Pacific harbor seal pupping season (December 15, 2014 to

June 1, 2015). During 127 days of visual and acoustic observations, Hanan & Associates counted a total of 63,598 Pacific harbor seals and 27,844 people. During the 2014 demolition and construction activities, Hanan & Associates observed a total of 20,259 takes by Level B harassment (*i.e.*, alerts, movements, and flushes) that could be attributed to demolition and construction activities (7,424 takes), the general public (10,000 takes), and other sources (2,835 takes). As of March 13, 2015, at least 60 harbor seal pups (including 6 still or premature births) have been born at the Children's Pool and there has been no indication of abandonment. In addition to the Pacific harbor seal sightings, PSOs recorded 24 sightings of cetaceans (gray whales, common and bottlenose dolphins), 366 sightings of California sea lions (at Seal Rock, Children's Pool beach, South Casa Beach, and on the reef), and 1 northern elephant seals (1 juvenile on Children's Pool beach) at the Children's Pool. One dead adult and one dead juvenile California sea lion were sighted on the Children's Pool beach after the start of the beach closure and after the construction activities stopped for the pupping season. These strandings were reported to NMFS.

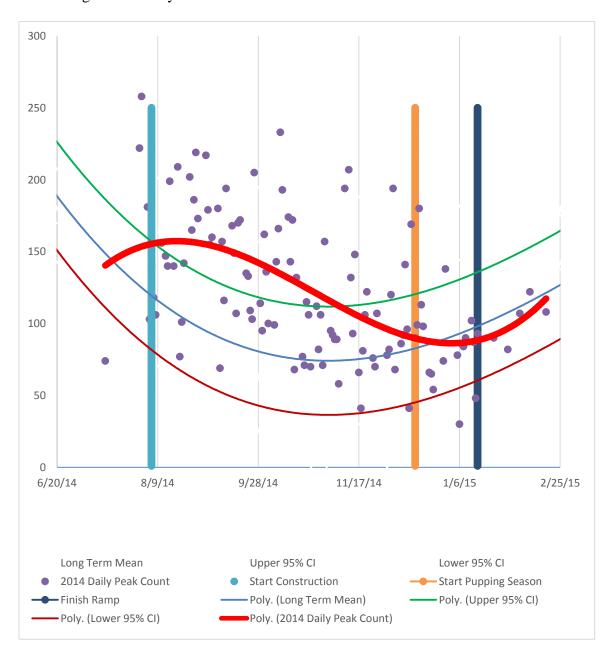
Hanan & Associates recorded mean in-air sound levels of 68.9 dB re 20  $\mu$ Pa (range of 51.5 to 97.2 dB re 20  $\mu$ Pa) during non-construction activities and 71.3 dB re 20  $\mu$ Pa (range of 49.4 to 102.7 dB re 20  $\mu$ Pa) during construction activities. During 2014, measured sound levels from the construction equipment reaching the pinnipeds did not exceed approximately 90 dB re 20  $\mu$ Pa at the haul-out area closest to the construction activities.

More information on the monitoring results from the City of San Diego's previous demolition and construction activities at the La Jolla Children's Pool Lifeguard Station

can be found in the final monitoring reports. The 2013 to 2014 and 2014 to 2015 monitoring reports can be found online at:

http://www.nmfs.noaa.gov/pr/permits/incidental/construction.htm#childrenspool.

Figure 2. Daily peak counts and long-term trends with a 95% confidence interval of Pacific harbor seals at Children's Pool from June 2014 to February 2015 based on monitoring at the site by Hanan & Associates.



# **Estimated Take by Incidental Harassment**

Except with respect to certain activities not pertinent here, the MMPA defines "harassment" as: any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [Level B harassment].

Table 2. NMFS's current underwater and in-air acoustic exposure criteria:

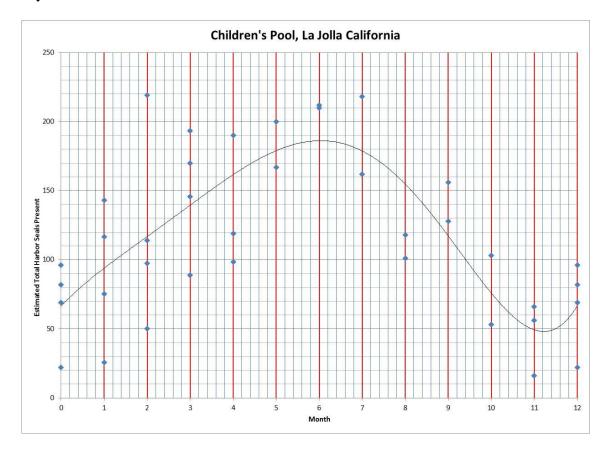
Underwater Impulsive (Non-Explosive) Sound						
Criterion	Criterion Definition	Threshold				
Level A harassment (injury)	Permanent threshold shift (PTS) (Any level above that which is known to cause TTS)	180 dB re 1 μPa-m (root means square [rms]) (cetaceans) 190 dB re 1 μPa-m (rms) (pinnipeds)				
Level B harassment	Behavioral disruption (for impulsive noise)	160 dB re 1 μPa-m (rms)				
Level B harassment	Behavioral disruption (for continuous noise)	120 dB re 1 μPa-m (rms)				
In-Air Sound						
Level A harassment	NA	NA				
Level B harassment	Behavioral disruption	90 dB re 20 µPa (harbor seals) 100 dB re 20 µPa (all other pinniped species) NA (cetaceans)				

NA = Not available or not assessed.

The City of San Diego and NMFS anticipate takes of Pacific harbor seals, California sea lions, and northern elephant seals by Level B (behavioral) harassment only incidental to the construction project at the Children's Pool. No takes by injury (Level A harassment), serious injury, or mortality are expected. NMFS will consider pinnipeds behaviorally reacting to the construction activities by flushing into the water, moving more than 1 m (3.3 ft), but not into the water; becoming alert and moving, but not moving more than 1 m; and changing direction of current movements by individuals as behavioral criteria for take by Level B harassment.

With proposed construction activities scheduled to begin in June 2015, the City of San Diego expects a range of 0 to 190 harbor seals to be present daily during June and a seasonal decline through November to about 0 to 50 harbor seals present daily. If all of the estimated harbor seals present are taken by incidental harassment each day, there could be a maximum of 10,000 takes (*i.e.*, approximately 2,947 adult males and 2,211 juvenile males, 2,842 adult females and 2,000 juvenile females based on age and sex ratios presented in Harkonen *et al.*, 1999) over the entire duration of the activities. An unknown portion of the incidental takes will be from repeated exposures as harbor seals leave and return to the Children's Pool area. A polynomial curve fit to counts by month was used by the City of San Diego to estimate the number of harbor seals expected to be hauled-out by day (see below and Figure 2 of the IHA application).

Figure 3. Estimated total harbor seals by month based on counts at the site by Hanan & Associates, Yochem and Stewart, and Children's Pool docents. The polynomial curve fits to counts by months was used to estimate harbor seals expected to be hauled-out by day.



Assuming the total seals predicted to haul-out daily at the Children's Pool are exposed to sound levels that are considered Level B harassment during days where sound is predicted to exceed 90 dB at the construction site (65 days), there could be a maximum of approximately 10,000 incidental takes (*i.e.*, exposures) of approximately up to 600 individual Pacific harbor seals over the duration of the activities. The estimated 600 individual Pacific harbor seals would be taken by Level B harassment multiple times during the proposed construction activities.

Very few California sea lions and/or northern elephant seals are ever observed at the Children's Pool (*i.e.*, one or two individuals). The City of San Diego requests the authority to incidentally take (*i.e.*, exposures) 10,000 Pacific harbor seals, 100 California sea lions, and 25 northern elephant seals, which will equate to 600, 2, and 1 individuals, respectively, being exposed multiple times. More information on the number of takes authorized, and the approximate percentage of the stock for the three species in the proposed action area can be found in Table 3 (below).

Table 3. Summary of the authorized incidental take by Level B harassment of pinnipeds for the City of San Diego's proposed construction activities generating in-air noise at the Children's Pool Lifeguard Station in La Jolla, CA.

Species	Take Authorization (Number of Exposures)	Estimated Number of Individuals Taken	Abundance	Approximate Percentage of Estimated Stock (Individuals)	Population Trend
Pacific harbor seal	10,000	600	30,968 – California stock	1.93	Increased in California 1981 to 2004
California sea lion	100	2	296,750 – U.S. stock	<0.01	Increasing
Northern elephant seal	25	1	179,000 – California breeding stock	<0.01	Increasing 3.8% annually since 1988

# **Encouraging and Coordinating Research**

Each construction phase and potential harassment activity will be evaluated as to observed sound levels and any pinniped reaction by type of sound source. Flushing would be documented by sex and age class. These data will provide information for IHA permitting in future projects. Potential additional mitigation (other than what is already required) will be discussed and suggested in the final report. NMFS has encouraged the City of San Diego to review and analyze any available data to determine baseline information as well as evaluate the impacts from the construction activities on the pinnipeds at the Children's Pool.

# Impact on Availability of Affected Species or Stock for Taking for Subsistence Uses

Section 101(a)(5)(D) of the MMPA requires NMFS to determine that the authorization will not have an unmitigable adverse effect on the availability of marine mammal species or stocks for subsistence use. There are not relevant subsistence uses of marine mammals implicated by this action. Therefore, NMFS has determined that the

total taking of affected species or stocks would not have an unmitigable adverse impact on the availability of such species or stocks for subsistence purposes.

# **Analysis and Preliminary Determinations**

Negligible Impact

Negligible impact is "an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival" (50 CFR 216.103). A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (*i.e.*, population-level effects). An estimate of the number of Level B harassment takes, alone, is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be "taken" through behavioral harassment, NMFS must consider other factors, such as the likely nature of any responses (their intensity, duration, etc.), the context of any responses (critical reproductive time or location, migration, etc.), as well as the number and nature of estimated Level A harassment takes, the number of estimated mortalities, and effects on habitat.

In making a negligible impact determination, NMFS evaluated factors such as:

- (1) The number of anticipated injuries, serious injuries, or mortalities;
- (2) The number, nature, and intensity, and duration of Level B harassment; and
- (3) The context in which the takes occur (*i.e.*, impacts to areas of significance, impacts to local populations, and cumulative impacts when taking into account successive/contemporaneous actions when added to baseline data);
  - (4) The status of the stock or species of marine mammals (i.e., depleted, not

depleted, decreasing, increasing, stable, impact relative to the size of the population);

- (5) Impacts on habitat affecting rates of recruitment/survival; and
- (6) The effectiveness of monitoring and mitigation measures.

No injuries (Level A harassment), serious injuries, or mortalities are anticipated to occur as a result of the City of San Diego's construction activities, and none are authorized by NMFS. The proposed activities are not expected to result in the alteration of reproductive behaviors, and the potentially affected species would be subjected to only temporary and minor behavioral impacts.

Behavioral disturbance may potentially occur incidental to the visual presence of humans and construction activities; however, pinnipeds at this site have likely adapted or become acclimated to human presence at this site. These "urbanized" harbor seals do not exhibit sensitivity at a level similar to that noted in harbor seals in some other regions affected by human disturbance (Allen *et al.*, 1984; Suryan and Harvey, 1999; Henry and Hammil, 2001; Johnson and Acevedo-Gutierrez, 2007; Jansen *et al.*, 2006; Hanan & Associates, 2011). Therefore, there is a high likelihood that many of the harbor seals present during the proposed construction activities would not be flushed off of the beach or rocks, as pinnipeds at this site are conditioned to human presence and loud noises (Hanan, 2004; Hanan & Associates, 2011) (see <a href="http://www.youtube.com/watch?v=4IRUYVTULsg">http://www.youtube.com/watch?v=4IRUYVTULsg</a>).

As discussed in detail above, the proposed project scheduling avoids sensitive life stages for Pacific harbor seals. Proposed project activities producing in-air noise will commence in June and end by December 15. The commencement date occurs after the end of the pupping season, affords additional time to accommodate lactation and weaning

of season pups, and takes into account periods of lowest haul-out occurrence. The end date falls approximately two weeks prior to January 1, the time after which most births occur, providing protection for pregnant and nursing harbor seals that may give birth before January 1.

Table 3 of this document outlines the number of Level B harassment takes that are anticipated as a result of these proposed activities. Due to the nature, degree, and context of Level B (behavioral) harassment anticipated and described (see "Potential Effects on Marine Mammals" section above) in this notice, this activity is not expected to impact rates of annual recruitment or survival for the affected species or stock (*i.e.*, California stock of Pacific harbor seals, U.S. stock of California sea lions, and California breeding stock of northern elephant seals), particularly given the proposed mitigation, monitoring, and reporting measures that would be implemented to minimize impacts to marine mammals.

The Children's Pool is one of the three known haul-out sites for Pacific harbor seal in San Diego County and the only rookery in San Diego County and the only mainland rookery on the U.S. west coast for this species between the border of Mexico and Point Mugu in Ventura County, CA. For the other marine mammal species that may occur within the action area (*i.e.*, California sea lions and northern elephant seals), there are no known designated or important feeding and/or reproductive areas. Many animals perform vital functions, such as feeding, resting, traveling, and socializing, on a diel cycle (*i.e.*, 24 hour cycle). Behavioral reactions to noise exposure (such as disruption of critical life functions, displacement, or avoidance of important habitat) are more likely to be significant if they last more than one diel cycle or recur on subsequent days (Southall *et* 

al., 2007). However, Pacific harbor seals have been hauling-out at Children's Pool during the year for many years (including during pupping season and while females are pregnant) while being exposed to anthropogenic sound sources such as vehicle traffic, human voices, etc. and other stimuli from human presence. While studies have shown the types of sound sources used during the construction activities have the potential to displace marine mammals from breeding areas for a prolonged period (e.g., Lusseau and Bejder, 2007; Weilgart, 2007), based on the best available information, this does not seem to be the case for the Pacific harbor seals at the Children's Pool. The Pacific harbor seals have repeatedly hauled-out to pup over many years and the NMFS Stock
Assessment Reports (NMFS, 2011) for this stock have shown that the population is increasing and is considered stable. Additionally, the proposed construction activities would increase sound levels in the environment in a relatively small area surrounding the lifeguard station (compared to the range of the animals), and some animals may only be exposed to and harassed by sound for less than a day.

NMFS's practice has been to apply the 90 dB re 20 μPa and 100 dB re 20 μPa received level threshold for in-air sound levels to determine whether take by Level B harassment occurs. Southall *et al.* (2007) provide a severity scale for ranking observed behavioral responses of both free-ranging marine mammals and laboratory subjects to various types of anthropogenic sound (see Table 4 in Southall *et al.* [2007]). NMFS has not established a threshold for Level A harassment (injury) for marine mammals exposed to in-air noise, however, Southall *et al.* (2007) recommends 149 dB re 20 μPa (peak flat) as the potential threshold for injury from in-air noise for all pinnipeds. No in-air sounds

from proposed construction activities would exceed 110 dB at the source and no measured sounds approached that sound level in 2013.

Of the 3 marine mammal species under NMFS jurisdiction that may or are known to likely occur in the action area, none are listed as threatened or endangered under the ESA. No incidental take has been requested to be authorized for ESA-listed species as none are expected to be within the action area. To protect these animals (and other marine mammals in the action area), the City of San Diego shall schedule construction activities with highest sound levels during the daily period of lowest haul-out occurrence; limit activities to the hours of daylight; erect a temporary visual and acoustic barrier; use PSOs and prohibit construction activities during harbor seal pupping season. No injury, serious injury, or mortality is expected to occur and due to the nature, degree, and context of the Level B harassment anticipated, the proposed activity is not expected to impact rates of recruitment or survival.

Although behavioral modifications, including temporarily vacating the area during the proposed construction activities, may be made by these species to avoid the resultant acoustic disturbance, the availability of alternate areas within these areas for species and the short and sporadic duration of the activities, have led NMFS to determine that the taking by Level B harassment from the specified activity would have a negligible impact on the affected species in the specified geographic region. NMFS believes that the time period of the proposed construction activities, the requirement to implement mitigation measures (*e.g.*, prohibiting construction activities during pupping season, scheduling operations to periods of the lowest haul-out occurrence, visual and acoustic barriers, and the addition of a new measure that helps protect against unexpected

abandonment of the site), and the inclusion of the monitoring and reporting measures, will reduce the amount and severity of the potential impacts from the activity to the degree that will have a negligible impact on the species or stocks in the action area.

Based on the analysis contained herein of the likely effects of the proposed specified activity on marine mammals and their habitat, and taking into consideration the implementation of the proposed monitoring and mitigation measures, NMFS finds that the total marine mammal take from the City of San Diego's activities would have a negligible impact on the affected marine mammal species or stocks.

#### Small Numbers

As mentioned previously, NMFS estimates that 3 species of marine mammals under its jurisdiction could be potentially affected by Level B harassment over the course of the IHA. It is estimated that up to 600 individual Pacific harbor seals, 2 individual California sea lions, and 1 northern elephant seal would be taken (multiple times) by Level B harassment, which would be approximately 1.93, less than 0.01, and less than 0.01% of the respective California, U.S., and California breeding stocks. The population estimates for the marine mammal species that may be taken by Level B harassment were provided in Table 2 of this document.

NMFS has determined, provided that the aforementioned proposed mitigation and monitoring measures are implemented, that the impact of the proposed construction activities at the Children's Pool Lifeguard Station in La Jolla, CA, June 2015 to June 2016, may result, at worst, in a temporary modification in behavior and/or low-level physiological effects (Level B harassment) of small numbers of certain species of marine mammals. Based on the analysis contained herein of the likely effects of the specified

activity on marine mammals and their habitat, and taking into consideration the implementation of the proposed mitigation and monitoring measures, NMFS preliminarily finds that small numbers of marine mammals will be taken relative to the populations of the affected species or stocks. See Table 2 for the proposed authorized take numbers of marine mammals.

#### **Endangered Species Act**

NMFS (Permits and Conservation Division) has determined that an ESA section 7 consultation for the issuance of an IHA under section 101(a)(5)(D) of the MMPA for this activity is not necessary for any ESA-listed marine mammal species under its jurisdiction, as the proposed action would not affect ESA-listed species.

# **National Environmental Policy Act**

To meet NMFS's National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.) requirements for the issuance of an IHA to the City of San Diego, NMFS prepared an Environmental Assessment (EA) in 2013 for a similar activity titled Environmental Assessment on the Issuance of an Incidental Harassment Authorization to the City of San Diego to Take Marine Mammals by Harassment Incidental to Demolition and Construction Activities at the Children's Pool Lifeguard Station in La Jolla, California to comply with the Council of Environmental Quality (CEQ) regulations and NOAA Administrative Order (NAO) 216-6. NMFS will evaluate the proposed action to determine whether the 2013 EA supports the City of San Diego's 2015 IHA request.

#### **Proposed Authorization**

As a result of these preliminary determinations, NMFS proposed to issue an IHA to the City of San Diego for conducting construction activities at the Children's Pool

Lifeguard Station in La Jolla, CA, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated. The duration of the IHA would not exceed one year from the date of its issuance. The proposed IHA language is provided below:

The City of San Diego, Public Works Department, Engineering and Capital Projects Branch, Architectural Engineering and Parks Division, 525 B Street, Suite 750, MS 908A, San Diego, California 92101, is hereby authorized under section 101(a)(5)(D) of the Marine Mammal Protection Act (16 U.S.C. 1371(a)(5)(D)), to harass small numbers of marine mammals incidental to the construction activities at the Children's Pool Lifeguard Station, June 2015 through June 2016, contingent upon the following conditions:

### 1. Effective Dates

This Authorization is valid from June 28, 2015 through June 27, 2016.

#### 2. Specified Geographic Region

This Authorization is valid only for the construction activities at the Children's Pool Lifeguard Station that shall occur in the following specified geographic area:

The La Jolla Children's Pool Lifeguard Station at 827 ½ Coast Boulevard, La Jolla California 92037 (32° 50'50.02" North, 117° 16'42.8" West), as specified in the City of San Diego's IHA application.

- 3. Species Authorized and Level of Takes
- (a) The incidental taking of marine mammals, by Level B harassment only, is limited to the following species in the La Jolla, California area:
  - (i) *Pinnipeds* see Table 2 (above) for authorized species and take numbers.

- (ii) If any marine mammal species are encountered during construction activities that are not listed in Table 3 (above) for authorized taking and are likely to be exposed to sound pressure levels (SPLs) at or above 90 decibels (dB) re 20  $\mu$ Pa for harbor seals and/or at or above 100 dB re 20  $\mu$ Pa for all pinniped species except harbor seals (for in-air noise), then the City of San Diego must shut-down operations to avoid take.
- (b) The taking by injury (Level A harassment), serious injury, or death of any of the species listed in Condition 3(a) above, or the taking of any kind of any other species of marine mammal, is prohibited and may result in the modification, suspension or revocation of this Authorization.
- 4. The methods authorized for taking by Level B harassment are limited to acoustic-generating equipment sources (*e.g.*, backhoe, dump truck, cement truck, air compressor, electric screw guns, jackhammer, concrete saw, chop saw, and hand tools) without an amendment to this Authorization:

#### 5. Prohibited Take

The taking of any marine mammal in a manner prohibited under this

Authorization must be reported immediately to the Office of Protected Resources,

National Marine Fisheries Service (NMFS), at 301-427-8401.

#### 6. Mitigation and Monitoring Requirements

The City of San Diego is required to implement the following mitigation and monitoring requirements when conducting the specified activities in order to achieve the least practicable adverse impact on affected marine mammal species or stocks:

Construction Prohibited during Pupping Season

(a) The construction activities shall be prohibited during the Pacific harbor seal pupping season at Children's Pool (December 15<sup>th</sup> to May 15<sup>th</sup>) and for an additional two weeks to accommodate lactation and weaning of late season pups. Thus, construction shall be prohibited from December 15<sup>th</sup> to June 1<sup>st</sup>.

#### Daily Construction Timing

(b) The construction activities shall be scheduled Monday through Friday; however, they may continue on weekends to ensure completion of the project in 2015. To the maximum extent practicable, the construction activities shall be conducted from approximately 8:30 a.m. to 3:30 p.m., during the daily period of lowest haul-out occurrence; however, construction activities may be extended from 7 a.m. to 7 p.m. (*i.e.*, daylight hours) to help assure that the project is completed during the 2015 construction window. Harbor seals typically have the highest daily or hourly haul-out period during the afternoon from 3 p.m. to 6 p.m.

#### Visual and Acoustic Barriers

- (c) A visual and acoustic barrier will be erected and maintained for the duration of the project to shield construction activities from beach view. The temporary barrier shall consist of 1.3 to 1.9 centimeter (½ to ¾ inch) plywood constructed 1.2 to 2.4 meters (4 to 8 feet) high depending on the location. The barriers will be placed at the site with input from NMFS West Coast Regional Office personnel so that they will hide as advantageously as possible the construction activities that may be seen by pinnipeds. *Protected Species Observers*
- (d) A NMFS-qualified, trained Protected Species Observer (PSO) shall be used to detect, document, and minimize potential impacts from construction activities.

The PSO shall attend the project site 30 minutes prior until 30 minutes after construction activities cease each day throughout the construction window. The PSO shall be approved by NMFS prior to construction activities. The PSO shall search for marine mammals using binoculars and/or the naked eye within the Level B (behavioral) harassment zones, which may vary upon the type of in-air sound being produced by the construction activities. The PSO will observe from a station along the breakwater wall as well as the base of the cliff below the construction area. If inclement weather limits visibility within the area of effect, the PSO will perform visual scans to the extent conditions allow. The PSO will not have to monitor on days or portions of days when there will be little chance of disturbance from construction activities (*e.g.*, nothing visual, sound levels at source less than 90 dB re 20 µPa, or all work activities inside the building).

- (e) The PSO shall visually scan the action area for the presence of marine mammals at least 30 minutes prior to the start-up and continuously throughout periods of in-air noise-generating activities. Visual scans shall continue for at least 30 minutes after each noise-generating episode has ceased.
- (f) The PSO shall use visual digital recordings and photographs to document individuals and behavioral responses to the construction activities. The PSO shall make hourly counts of the number of pinnipeds present and record sound or visual events that result in behavioral responses and changes, whether during construction activities or from public stimuli. During these events, pictures and videos will be taken when possible to document individuals and behavioral responses.

- (g) A PSO shall record the following information when a marine mammal is sighted:
- (i) Species, group size, age/size/sex categories (if determinable), behavior when first sighted and after initial sighting, heading (if consistent), distribution, bearing and distance relative to the sound source(s), group cohesiveness, duration of presence, apparent reaction to the construction activities (*e.g.*, none, avoidance, approach, etc.), direction and speed of travel, duration of presence, and if there are other causes of potential disturbance occurring;
- (ii) Date, time, location, activity of construction operations, monitoring and mitigation measures implemented (or not implemented), tidal stage, weather conditions, Beaufort sea state, wind speed, visibility, and sun glare; and
- (iii) The data listed under Condition 6(g)(ii) shall also be recorded at the start and end of each observation watch and during a watch whenever there is a change in one or more variables.
- (h) A PSO shall also record the time of arrival and departure on site, commencement and cessation of in-air noise construction activities, and presence of humans on the beach. Whenever possible, the PSO should determine as to whether or not the harassment or pinnipeds is attributable to the construction activities and/or the presence of the public on the beach and around the Children's Pool area. A PSO shall record the number of people on the beach and surrounding areas as well as their location relative to the animals.

**Buffer Zones** 

(i) Buffer zones shall be established (*i.e.*, where sound pressure levels [SPLs] are at or above 90 decibels (dB) re 20 μPa for harbor seals and/or at or above 100 dB re 20 μPa for all pinniped species except harbor seals [for in-air noise]) around the construction activities so that in-air sounds associated with the construction activities no longer exceed levels that are potentially harmful to marine mammals.

#### In-Air Noise Monitoring

In-air noise monitoring and reporting shall be performed during the (i) construction activities at and near the Children's Pool Lifeguard Station. The PSO shall have access to handheld digital sound level measuring devices. The study will characterize in-air sound levels in the area related to (e.g., construction equipment including backhoe, dump truck, cement truck, air compressor, electric screw guns, jackhammer, concrete saw, chop saw, and hand tools) and in the absence (as a background and baseline [i.e., ambient] for the project) of all construction activities, and confirm or identify harassment isopleths for all types of and construction activities conducted. To better assess in-air sound propagation and source levels, the distance from the sound meter to each sound-producing activity when conducting sound measurements shall be noted. Monitoring shall be conducted three to five days prior to construction activities and shall include hourly systematic counts of pinnipeds using the beach, Seal Rock, and associated reef areas to provide baseline data regarding recent haul-out behavior and patterns as well as background noise levels near the time and construction activities. Monitoring shall continue for 60 days following the end of demolition and construction activities. Following construction, the City of San Diego will have a

program where a PSO that will randomly select a day per week to visit the Children's Pool.

#### Potential Abandonment Survey

After the first two months of monitoring during construction activities, the (k) City of San Diego shall take the mean number of observed harbor seals at the Children's Pool in a 24-hour period across the two months and compare it to the mean of the lower 95 percent confidence interval in Figure 3 (see above). If the observed mean is lower, the City of San Diego shall shut-down construction activities and work with NMFS and other harbor seal experts (e.g., Mark Lowry, Dr. Sarah Allen, Dr. Pamela Yochem, and/or Dr. Brent Stewart) to develop and implement a revised mitigation plan to further reduce the number of takes and potential impacts. Once a week every week thereafter, the City of San Diego shall take the same mean of observed harbor seals across the previous three tide cycles (a tide cycle is approximately 2 weeks) and compare it to the 95% lower confidence interval in Figure 3 for the same time period. If the observed mean is lower, the City of San Diego shall shut-down and take the action described above. If abandonment of the site is likely, monitoring shall be expanded away from the Children's Pool to determine if animals have been temporarily displaced to haul-out sites in the southern California area (e.g., Torrey Pines, Point Loma, etc.).

# 7. Reporting Requirements

The City of San Diego is required to:

(a) Submit a draft report on all activities and monitoring results to the Office of Protected Resources, NMFS, within 90 days of the completion of the construction activities at the Children's Pool Lifeguard Station. This report must contain and

summarize the following information:

- (i) Dates, times, locations, weather, sea conditions (including Beaufort sea state and wind speed), and associated activities during all construction activities and marine mammal sightings;
- (ii) Species, number, location, distance from the PSO, and behavior of any marine mammals, as well as associated construction activities, observed throughout all monitoring activities.
- (iii) An estimate of the number (by species) of marine mammals that: (A) are known to have been exposed to the construction activities (based on visual observation) at received levels greater than or equal 90 dB re 20  $\mu$ Pa for harbor seals and 100 dB re 20  $\mu$ Pa for all other pinniped species for in-air noise with a discussion of any specific behaviors those individuals exhibited; and (B) may have been exposed (based on reported values and modeling measurements for the construction equipment) to the construction activities in-air noise at received levels greater than or equal 90 dB re 20  $\mu$ Pa for harbor seals and 100 dB re 20  $\mu$ Pa for all other pinniped species with a discussion of the nature of the probable consequences of that exposure on the individuals that have been exposed. NMFS will consider pinnipeds flushing into the water; moving more than 1 m (3.3 ft), but not into the water; becoming alert and moving, but not moving more than 1 m; and changing direction of current movement by individuals as behavioral criteria for take by Level B harassment.
- (iii) A description of the implementation and effectiveness of the: monitoring and mitigation measures of the IHA.
  - (b) Submit a final report to the Chief, Permits and Conservation Division,

Office of Protected Resources, NMFS, within 30 days after receiving comments from NMFS on the draft report. If NMFS decides that the draft report needs no comments, the draft report shall be considered to be the final report.

8. In the unanticipated event that the City of San Diego discovers a live stranded marine mammal (sick and/or injured) at Children's Pool, they shall immediately contact Sea World's stranded animal hotline at 1-800-541-7235. Sea World shall also be notified for dead stranded pinnipeds so that a necropsy can be performed. In all cases, NMFS shall be notified as well, but for immediate responses purposes, Sea World shall be contacted first.

# Reporting Prohibited Take

In the unanticipated event that the specified activity clearly causes the take of a marine mammal in a manner prohibited by this Authorization, such as an injury (Level A harassment), serious injury or mortality, the City of San Diego shall immediately cease the specified activities and immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401 and/or by e-mail to *Jolie.Harrison@noaa.gov* and *Howard.Goldstein@noaa.gov* and the West Coast Regional Stranding Coordinator (562-980-3230). The report must include the following information:

(a) Time, date, and location (latitude/longitude) of the incident; the type of activity involved; description of the circumstances during and leading up to the incident; status of all sound source use in the 24 hours preceding the incident; water depth; environmental conditions (*e.g.*, wind speed and direction, Beaufort sea state, cloud cover, and visibility); description of marine mammal observations in the 24 hours preceding the

incident; species identification or description of the animal(s) involved; the fate of the animal(s); and photographs or video footage of the animal (if equipment is available).

Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS shall work with the City of San Diego to determine what is necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. The City of San Diego may not resume their activities until notified by NMFS via letter or e-mail, or via telephone.

Reporting an Injured or Dead Marine Mammal with an Unknown Cause of Death

In the event that the City of San Diego discovers an injured or dead marine mammal, and the lead PSO determines that the cause of the injury or death is unknown and the death is relatively recent (*i.e.*, in less than a moderate state of decomposition as described in the next paragraph), the City of San Diego will immediately report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401, and/or by e-mail to *Jolie.Harrison@noaa.gov* and *Howard.Goldstein@noaa.gov*, and the NMFS West Coast Regional Office (1-866-767-6114) and/or the West Coast Regional Stranding Coordinator (562-980-3230). The report must include the same information identified in the Condition 8(a) above. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with the City of San Diego to determine whether modifications in the activities are appropriate.

Reporting an Injured or Dead Marine Mammal Not Related to the Activities

In the event that the City of San Diego discovers an injured or dead marine mammal, and the lead PSO determines that the injury or death is not associated with or

related to the activities authorized in Condition 2 to 4 of this Authorization (*e.g.*, previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), the City of San Diego shall report the incident to the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at 301-427-8401, and/or by e-mail to *Jolie.Harrison@noaa.gov* and *Howard.Goldstein@noaa.gov*, and the NMFS West Coast Regional Office (1-866-767-6114) and/or the West Coast Regional Stranding Coordinator (562-980-3230), within 24 hours of the discovery. The City of San Diego shall provide photographs or video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network. Activities may continue while NMFS reviews the circumstances of the incident.

9. A copy of this Authorization must be in the possession of all contractors and PSOs operating under the authority of this IHA.

**Request for Public Comments** 

NMFS requests comment on our analysis, the draft authorization, and any other

aspect of the preliminary determinations and notice of the proposed IHA for the City of

San Diego's construction activities at the La Jolla Children's Pool Lifeguard Station.

Please include with your comments any supporting data or literature citations to help

inform our final decision on the City of San Diego's request for an MMPA authorization.

Concurrent with the publication of this notice in the **Federal Register**, NMFS is

forwarding copies of this IHA application to the Marine Mammal Commission and its

Committee of Scientific Advisors.

Dated: May 11, 2015.

Perry F. Gayaldo,

Deputy Director,

Office of Protected Resources,

National Marine Fisheries Service.

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